

List of Claims

Following is list of claims currently pending.

1. -9. (Cancelled)

10. (Previously Presented) A method for patterning structures on a substrate, comprising:

providing a substrate underneath a tip of an Atomic Force Microscope;

providing a vapour of a material, which is suitable for Chemical Vapour Deposition onto the substrate when decomposed, in a space between the tip and the substrate; and

exposing the tip to a light beam emitted by a light emitting device in such a way that the tip intensifies an electromagnetic near-field to such an extent that the vapour is decomposed, wherein an intensity of the light beam is not enough to decompose the vapour.

11. (Original) A method according to claim 10, wherein providing said vapour comprises providing a gas selected from the group consisting of Halides, Hydrides, Metal Organic Compounds, AuClPF_3 , $\text{W}(\text{CO})_6$, TiCl_4 , TaCl_5 , WF_6 , SiH_4 , GeH_4 , $\text{AlH}_3(\text{NMe}_3)_2$, NH_3 , AlMe_3 , $\text{Ti}(\text{CH}_2\text{tBu})_4$, $\text{Ti}(\text{OiPr})_4$, $\text{Ti}(\text{NMe}_2)_4$, $\text{Cu}(\text{acac})_2$, and $\text{Ni}(\text{CO})_4$.

12. (Original) A method according to claim 10, wherein exposing said tip to said light beam comprises emitting said light beam onto said tip in such a way that a polarization of said light beam is parallel to a longitudinal axis of said tip.

13. (Original) A method according to claim 10, further comprising adapting a wavelength of said light beam to match the size of said tip such that a sufficient amplification of said light beam is achieved.

14. (Original) A method according to claim 10, further comprising applying a laser to emit said light beam and exposing said tip to said light beam.

15. (Original) A method according to claim 10, wherein said Atomic Force Microscope has multiple tips, further comprising providing said substrate underneath said multiple tips.

16. (Original) A method according to claim 15, further comprising metalizing one or more of said multiple tips.